

**REMARKS**

The Official Action mailed September 2, 2005, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on December 16, 2003; August 27, 2004; and June 20, 2005.

Claims 1-14 and 17-27 were pending in the present application prior to the above amendment. Claims 7 and 20 have been canceled without prejudice or disclaimer, and claims 1-6, 8, 9, 13, 17-19, 21, 22, 26 and 27 have been amended to better recite the features of the present invention. The Applicant notes with appreciation the allowance of claims 2-6, 18 and 19 (page 7, Paper No. 20050831). Accordingly, claims 1-6, 8-14, 17-19 and 21-27 are now pending in the present application, of which claims 1-6 and 17-19 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Official Action objects to claims 14 and 27 noting that these claims are identical. In response, claim 27 has been amended to correct its dependency. Specifically, claim 27 has been amended to depend from claims 17-19 instead of from claims 1-6. Reconsideration is requested.

The Official Action objects to the specification and claims suggesting that "activating layer" should be "active layer" and that "involatile" should be "nonvolatile." In response, the specification and claims have been amended in accordance with the Examiner's suggestions. Reconsideration is requested.

The Official Action rejects claims 1, 8, 9, 11-14, 17, 21, 22 and 24-27 as anticipated by U.S. Patent Application Publication No. 2002/0179964 to Kato et al. The Applicant respectfully submits that an anticipation rejection cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Independent claim 1 has been amended to recite that a surface roughness of a channel region is 0.1 nm through 60 nm in a P-V value, which is also recited in allowed claims 3, 4 and 18. Independent claim 17 has been amended to recite that a semiconductor active layer is a polycrystal semiconductor film constituted by aggregating a plurality of crystal grains elongated in the same direction, which is also recited in allowed claims 4 and 6. Also, some of the claims have also been amended to remove features which are not believed to be critical to the patentability of the claims. Kato does not teach the above-referenced features of the present invention, either explicitly or inherently.

Since Kato does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are in order and respectfully requested.

The Official Action rejects claims 1, 8, 9, 11-14 and 27 as obvious based on Kato. The Official Action rejects claims 7 and 20 as obvious based on the combination of Kato and U.S. Patent No. 5,643,826 to Ohtani et al. The Official Action rejects claims 10 and 23 as obvious based on the combination of Kato and U.S. Patent No. 5,289,027 to Terrill et al. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference

teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. As noted above, Kate does not teach the features of claim 1 (that a surface roughness of a channel region is 0.1 nm through 60 nm in a P-V value) or the features of claim 17 (that a semiconductor active layer is a polycrystal semiconductor film constituted by aggregating a plurality of crystal grains elongated in the same direction).

Ohtani and Terrill do not cure the deficiencies in Kato. The Official Action relies on Ohtani and Terrill to allegedly teach the features of the dependent claims. Specifically, the Official Action relies on Ohtani to teach a concentration of a metal element (page 6, Paper No. 20050831) and on Terrill to teach a channel length of a memory element (page 7, Id.). However, Kato, Ohtani and Terrill, either alone or in combination, do not teach or suggest that a surface roughness of a channel region is 0.1 nm through 60 nm in a P-V value or that a semiconductor active layer is a polycrystal semiconductor film constituted by aggregating a plurality of crystal grains elongated in the same direction.


Since Kato, Ohtani and Terrill do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Further, allowed independent claims 3 and 5 have been amended for clarity. Specifically, claims 3 and 5 have been amended to recite that a channel region is a polycrystal semiconductor film crystallized by being irradiated with a continuously oscillating laser beam at least in the same channel region. This feature is supported in the specification, for example, at page 5, paragraph [0029] of the present specification.

Still further, the Official Action asserts that "United States Patent Application Publication 2005/0036382 is related to this application" and the '382 application is cited on Form PTO-892. For the record, the Applicant notes that the '382 publication is a publication of the subject application and is not available as prior art against the subject application. Therefore, the '382 application is not appropriate for inclusion on Form PTO-892. Appropriate correction of the record is requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

  
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